

## CLIMATOLOGY OF COSTA RICA.

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TABLE 1.—Hourly observations at the Observatory, San Jose de Costa Rica, during February, 1902.

Hours.	Pressure.		Temperature.		Relative humidity.		Rainfall.	
	Observed, 1902.	Normal, 1889-1900.	Observed, 1902.	Normal, 1889-1900.	Observed, 1902.	Normal, 1889-1900.	Observed, 1902.	Normal, 1889-1900.
660+	660+	° C.	° C.	%	%	Mm.	Hrs.	
1 a. m.	4.90	4.28	16.78	16.45	84	83	0.0	0.0
2 a. m.	4.52	3.79	16.24	16.20	86	84	0.0	0.0
3 a. m.	4.18	3.46	16.10	15.95	84	84	0.0	0.0
4 a. m.	4.04	3.30	15.94	15.75	84	84	0.5	0.1
5 a. m.	4.10	3.39	15.71	15.64	84	84	0.0	0.0
6 a. m.	4.31	3.69	15.46	15.51	85	84	0.0	0.1
7 a. m.	4.70	4.12	15.50	15.55	85	84	0.0	0.0
8 a. m.	4.85	4.48	16.66	16.67	76	78	0.0	0.0
9 a. m.	5.02	4.72	19.39	19.20	65	70	0.0	0.0
10 a. m.	5.10	4.90	21.75	21.40	60	62	0.0	0.0
11 a. m.	5.11	4.80	23.65	23.20	53	58	0.0	0.0
12 m.	4.77	4.38	25.04	24.26	48	56	0.0	0.0
1 p. m.	4.28	3.85	25.87	25.07	51	54	0.0	0.0
2 p. m.	3.76	3.30	26.06	25.15	48	53	0.0	0.0
3 p. m.	3.38	2.79	25.24	24.75	52	55	0.0	0.1
4 p. m.	3.24	2.54	23.33	23.74	63	58	3.5	0.1
5 p. m.	3.37	2.64	21.82	22.12	67	63	0.2	0.1
6 p. m.	3.68	2.88	20.40	20.52	74	70	0.8	0.0
7 p. m.	4.05	3.33	19.26	18.85	78	76	0.0	0.1
8 p. m.	4.25	3.85	18.59	18.14	82	79	0.0	0.1
9 p. m.	4.79	4.25	18.29	17.75	81	80	6.4	0.7
10 p. m.	5.05	4.54	17.85	17.31	83	82	5.5	0.1
11 p. m.	5.17	4.66	17.55	17.00	83	83	0.4	0.0
Midnight	5.09	4.58	17.15	16.70	84	83	0.0	0.0
Mean	664.40	663.85	19.44	19.33	73	73	.....	.....
Minimum	660.80	659.35	12.2	8.2	26	.....	.....	.....
Maximum	666.40	667.72	30.7	32.0	98	.....	6.4	.....
Total	.....	.....	.....	.....	17.3	1.5	4.75	.....

REMARKS.—The barometer is 1,169 meters above sea level. Readings are corrected for gravity, temperature, and instrumental error. The dry and wet bulb thermometers are 1.5 meters above ground and corrected for instrumental errors. The hourly readings for pressure, and wet and dry bulb thermometers, are obtained by means of Richard registering instruments, checked by direct observations every three hours from 7 a. m. to 10 p. m. The hourly rainfall is as given by Hottinger's self-register, checked once a day. Under maximum, the greatest hourly rainfall for the month is given. The standard rain gage is 1.5 meters above ground. Since January 1, 1902, observations at San Jose have been made on seventy-fifth meridian time, which is 0 hours, 36 minutes, 13.3 seconds *in advance* of San Jose local time. The normals for pressure, temperature, and relative humidity have been adjusted to this time; the normal for rainfall in Table 1 and the sunshine observations and normal in Table 2 refer to local time.

TABLE 2.

Time.	Sunshine.		Cloudiness.		Temperature of the soil at depth of—				
	Observed, 1902.	Normal, 1889-1900.	Observed, 1902.	Normal, 1889-1900.	0.15 m.	0.30 m.	0.60 m.	1.20 m.	3.00 m.
7 a. m.	Hours. 10.62	Hours. 10.35	% 42	% 32	° C. 21.04	° C. 20.63	° C. 21.31	° C. 20.22	° C. 20.43
8 a. m.	20.08	22.76	.....	.....	.....	.....	.....	.....	.....
9 a. m.	21.75	22.08	.....	.....	.....	.....	.....	.....	.....
10 a. m.	20.92	21.18	44	38	21.34	20.69	21.12	20.23	.....
11 a. m.	21.18	21.42	.....	.....	.....	.....	.....	.....	.....
12 m.	21.82	21.21	.....	.....	.....	.....	.....	.....	.....
1 p. m.	20.10	21.29	44	44	21.96	21.63	21.10	20.21	.....
2 p. m.	20.75	21.82	.....	.....	.....	.....	.....	.....	.....
3 p. m.	17.93	21.45	.....	.....	.....	.....	.....	.....	.....
4 p. m.	13.89	19.12	63	53	23.00	21.91	21.37	20.27	.....
5 p. m.	14.05	14.56	.....	.....	.....	.....	.....	.....	.....
6 p. m.	4.97	4.27	.....	70	54	22.21	21.85	21.38	20.22
7 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....
8 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....
9 p. m.	.....	.....	.....	55	43	21.97	21.80	21.38	20.23
10 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....
11 p. m.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Midnight	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mean	.....	55	44	21.92	21.63	21.28	20.24	20.43	.....
Total	210.07	221.51	.....	.....	.....	.....	.....	.....	.....

TABLE 3.—Rainfall at stations in Costa Rica, February, 1902.

Stations.	Height above sea level.	Observed, 1902.	Normals.		
			Amount.	Number of days.	Number of years.
Sipirio (Talamancas)	60	*	*	1	11
Boca Banana	3	292	13	6	16
Limon	3	208	12	7	10
Swamp Mouth	3	222	6	2	10
Zent	20	225	8	11 mo.	.....
Siquires	60	291	9	2	8
Guapiles	300	210	4	1	114
Caribalco (Sarapiqui)	835	422	16	3	194
San Carlos	161	181	11	3	179
Las Lomas	266	298	8	1	131
Peralta	332	363	12	3	10
Turrialba	620	*	*	5	56
Juan Vinas	1,040	77	7	5	6
Santiago	1,100	158	13	11 mo.	.....
Paraiso	1,336	43	7	8 mo.	.....
Cachi	1,068	105	6	3 mo.	.....
Orosi	1,068	.....	.....	.....	.....
Las Concavas	.....	33	12	8 mo.	.....
Cartago	1,450	22	10	5	27
Tres Rios	1,300	15	3	13	9
San Francisco Guard	1,187	14	4	6	9
San Jose	1,160	17	3	13	5
La Verbena	1,140	3	3	5	10
Nuestro Amo	.....	7	3	6	11
Alajuela	950	53	4	1	1
San Isidro Alajuela	1,346	83	2	11 mo.	.....

\* Observations not received.

TABLE 4.—Observations taken at the stations of Port Limon and Zent, February, 1902.

Stations.	Pressure.			Temperature.			Relative humidity.
	Minimum.	Maximum.	Mean.	Minimum.	Maximum.	Mean.	
Port Limon	Inches. 761.7	Inches. 668.3	Inches. 765.69	° 19.5	° 31.0	° 24.35	% 84
Zent	.....	.....	.....	17.8	33.6	25.38	% 81

Stations.	Rainfall.			Temperature of soil at depth of—		
	Cloudiness.	Sunshine.	Amount.	0.15 m.	0.30 m.	0.60 m.
Port Limon	% 61	Hours. 156.52	Mm. 225	12	° 25.70	° 25.55
Zent	% 61	.....	.....	8	° 25.56	° 25.56

REMARKS.—At Port Limon the hours of direct observation are 8 a. m. and 2 and 8 p. m., San Jose local time; the means for temperature and relative humidity are obtained from two-hourly readings given by a Richard self-registering thermometer.